



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,355	02/11/2002	Karen A. Moore	B-128	5743
7590	10/28/2004		EXAMINER	
Stephen R. Christian			FLETCHER III, WILLIAM P	
P. O. Box 1625				
Idaho Falls, ID 83415-3899			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/074,355	MOORE ET AL.
	<b>Examiner</b> William P. Fletcher III	<b>Art Unit</b> 1762

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

THE REPLY FILED 11 October 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

a)  The period for reply expires 3 months from the mailing date of the final rejection.  
 b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
 ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1.  A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2.  The proposed amendment(s) will not be entered because:

- they raise new issues that would require further consideration and/or search (see NOTE below);
- they raise the issue of new matter (see Note below);
- they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: *See Continuation Sheet.*

3.  Applicant's reply has overcome the following rejection(s): the rejection of claim 76.

4.  Newly proposed or amended claim(s) \_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5.  The a) affidavit, b) exhibit, or c) request for reconsideration has been considered but does NOT place the application in condition for allowance because: See Continuation Sheet.

6.  The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7.  For purposes of Appeal, the proposed amendment(s) a) will not be entered or b) will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_.

Claim(s) objected to: 76 and 77.

Claim(s) rejected: 13-31,69-75,78 and 79.

Claim(s) withdrawn from consideration: \_\_\_\_.

8.  The drawing correction filed on \_\_\_\_ is a) approved or b) disapproved by the Examiner.

9.  Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). 7/19/2004.

10.  Other: Please not the attached Notice of Non-Compliant Amendment.

*WPF 10/06/2004*

William Phillip Fletcher III  
Patent Examiner, USPTO  
Group Art Unit 1762

Continuation of 2. NOTE: The proposed amendment is non-compliant (see attached). Consequently, further consideration is required. Additionally, the examiner has not, heretofore, considered a claim of the scope of proposed claim 71. Consequently, further consideration and search is required..

Continuation of 5. does NOT place the application in condition for allowance because:

Applicant's arguments filed 10/11/2004 have been fully considered but they are not persuasive. Applicant's arguments with respect to the rejection of independent claim 13 are addressed in detail below.

As an initial point, the examiner notes that the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

Applicant argues that there is no motivation to combine the cited references because "it does not appear that Ivey teaches or suggests reuse of a particulate...[and] Matsunaga does not appear to teach or suggest that previously nitrided, metal particulate may be reconstituted (successfully) into a spray metal wire...for achieving reduction of waste." To clarify the record, the point at issue is whether or not it would have been obvious to one of ordinary skill in the art to provide a zone of reduced air pressure proximate the spray gun. Ivey suggests such a zone to collect overspray. It is the examiner's position that such collection reduces waste. Nowhere does the examiner state or suggest that "reducing waste" requires a continuous recycling, reuse, and/or reconstitution of coating material in the same coating method/apparatus. Again, the test is not whether the references may be bodily incorporated, but what the combined teaching would suggest to one of ordinary skill in the art. Although Ivey discloses further use of the collected coating material in the same coating method/apparatus, this does not change the fact that overspray is collected. Generally speaking, nitrided, metal particulate has use outside of the disclosed coating method and collection of the un-used material facilitates this reuse (i.e., the material is not wasted). Consequently, the combined teaching of these references, taken as a whole, suggests that utilizing a zone of reduced air pressure to collect of oversprayed, nitrided, metal particulate, reduces waste by, in some fashion, reserving the overspray for future use.

Applicant argues that overspray is not a problem in Matsunaga. This position is unsupported by evidence of record. See MPEP 716.01(c)(II). Further, applicant's further statements belie this position. Specifically, applicant states that "particles that do not strike against the surface of the substrate (at a high speed) would simply cool and become solid particulate." It is the examiner's position that such particles collect inside Matsunaga's pipeline. This is oversprayed material that would otherwise be wasted if not collected. Again, the test is not whether the references may be bodily incorporated, but what the combined teaching would suggest to one of ordinary skill in the art. Ivey speaks about "drips" from uncollected liquid overspray. This "drips" are equivalent to the solid particulate referred to by applicant. Consequently, the combined teaching of these references, taken as a whole, suggests that utilizing a zone of reduced air pressure to collect oversprayed particulate reduces or eliminates the presence of such overspray and, thereby, reduces or eliminates waste of the oversprayed material.

Applicant argues that, because Rubenstein and Ivey teach different ways of addressing overspray, combination of both with Matsunaga is superfluous. The examiner disagrees. It is the examiner's position that it would have been obvious to one of ordinary skill in the art to modify the method of Matsunaga so as to spray apply the coating material according to the method of Rubenstein (i.e., by mounting the plasma spraying nozzle on the end of a lance, inserting the lance into the pipe, and moving the nozzle via the lance while spraying). One of ordinary skill in the art would have been motivated to do so by the desire and expectation of successfully coating the interior surface of the hollow article with the conductive material utilizing an apparatus with a long service life, little wear, and few moving parts. As noted above, it would have been obvious to one of ordinary skill in the art to utilize a zone of reduced air pressure to collect overspray and reduce waste. Again, the test is not whether the references may be bodily incorporated, but what the combined teaching would suggest to one of ordinary skill in the art. Applicant's argument is not persuasive because, while both Rubenstein and Ivey may address overspray, this does not change the fact that Rubenstein discloses a suitable means for spray-coating the interior of a hollow article and that the advantages of long service life, little wear, and few moving parts are maintained in both the presence and absence of overspray.

With respect to the rejection of claim 14, applicant's arguments regarding the spray device of Matsunaga (Fig. 29) are noted. It remains the examiner's position that, because plasma spraying is an art-recognized (Matsumoto) means for depositing the insulating materials disclosed by Matsunaga, it would have been obvious to utilize this method to deposit these materials. See MPEP 2144.07.

Applicant's arguments with respect to most dependent claims refer to "likely" or "probable" scenarios. Such arguments are unsupported by evidence of record. See MPEP 716.01(c)(II). Further, the fact that something is "likely" or "probable" does not mean that it necessarily must occur. Last, these arguments do not address the positions taken by the examiner in the rejections of record, particularly with respect to introduction of cooling gas. The exception is found in the paragraphs bridging pages 14-15 of the above-mentioned response. The examiner is persuaded from the evidence presented by applicant, that one of ordinary skill in the art would not have introduced water as recited in claim 76.

Applicant has requested clarification of the examiner's position on claims 70-72, 74, and 75. These claims recite measuring the position of the spray gun in relation to the interior surface of the pipe, controlling the gun in response to this measurement, and measuring the thickness of the coating. It is the examiner's position that these claims are open to any means of measuring and any means of controlling. Because the artisan, in performing the method disclosed by this combination of references, inherently selects a position for the spray gun and moves the gun accordingly to deposit the coating, the position of the gun is inherently measured and controlled in response thereto. Further, because the artisan, in performing the method disclosed by this combination of references, inherently stops after a coating of a desired thickness is deposited, the thickness of the coating is - whether by eye, elapsed deposition time, etc. - inherently controlled.

Lastly, applicant has argued that, because Rubenstein and Muehlberger teach different relative movements of the pipe and spray gun, combination of the two with Matsunaga is superfluous. The examiner disagrees. Again, the test is not whether the references may be bodily incorporated, but what the combined teaching would suggest to one of ordinary skill in the art. It is the examiner's position that Muehlberger teaches cooling of a plasma spray gun to prevent damage thereto. Whether this gun is stationary or moving is irrelevant. The advantage to cooling the gun still exists.